

ABSTRACT

A modular, on-board, inert gas generating system for aircraft is disclosed in which main components such as a heat exchanger, filter, air separation module, and turbocharger are provided in a modular unit sized to provide a variable flow of nitrogen-enriched air to the aircraft spaces to be inerted. For different inert gas requirements, for example in larger aircraft, multiple modular units may be provided without redesigning the basic system. A method for inerting fuel tanks, cargo holds and other void spaces using the modular approach and turbocharged engine bleed air is also disclosed.